

Notice No.3

Rules and Regulations for the Classification of Naval Ships, January 2021

The status of this Rule set is amended as shown and is now to be read in conjunction with this and prior Notices. Any corrigenda included in the Notice are effective immediately.

Please note that corrigenda amends to paragraphs, Tables and Figures are not shown in their entirety.

Issue date: June 2021

Amendments to	Effective date	IACS/IMO implementation (if applicable)
Volume 3, Part 1, Chapter 2, Sections 1, 3 & 7	1 July 2021	N/A
Volume 3, Part 3, Chapter 2, Section 2	1 July 2021	N/A

Volume 3, Part 1, Chapter 2

Provision Refrigeration

■ Section 1

General requirements

1.2 Documentation required for design review

1.2.2 **System Design Description.** A System Design Description, see [Vol 3, Pt 1, Ch 3, 3.5 Fuel oil storage and transfer systems of the refrigeration system\(s\)](#) [Vol 2, Pt 1, Ch 3, 3.5 System design description](#), of the refrigeration system(s) that details system capability and functionality under defined operating and emergency conditions within the normal concept of operation role of the ship. The arrangements for refrigerated stores for the ship are to be agreed between the designer and the Owner and are to be specified in the System Design Description.

■ Section 3

Refrigerating machinery and refrigerant storage compartment arrangements

3.1 General

3.1.1 Refrigerating machinery is to be located in a well ventilated compartment. In general, the arrangements are to be such that all components of the refrigerating machinery can be readily opened up for inspection or replacement. Space is to be provided for the withdrawal and renewal of the tubes in 'shell and tube' type evaporators (secondary refrigerant coolers) and condensers. Proposals for alternative arrangements are to be submitted to LR for consideration. Compartments containing refrigerating machinery and refrigerant storage compartments are to comply with the requirements of [Vol 2, Pt 11, Ch 4 Refrigeration System Arrangements](#).

Existing paragraphs 3.1.2 to 3.1.4 have been deleted.

Existing sub-Section 3.2 has been deleted.

Existing sub-Sections 3.3 to 3.4 have been renumbered 3.2 to 3.3.

Existing Section 4 has been deleted and sections 5-7 renumbered 4-6.

■ Section 7

Testing and Trials.

Existing sub-Sections 7.1 to 7.3 have been moved to Vol 2, Pt 11, Ch 4, 5.1 to 5.3.

6.1 General

6.1.1 Testing and trials in accordance with [Vol 2, Pt 11, Ch 4 Refrigeration System Arrangements](#) are to be carried out as applicable

Volume 3, Part 3, Chapter 2

Environmental Protection

■ Section 2

ENV characters

2.9 Refrigeration systems, RS character

2.9.3 Where possible, natural refrigerants, such as ammonia, and carbon dioxide and, or hydrofluoroolefins (HFOs), should be used. Where hydrofluorocarbon (HFC) refrigerants are used, they are to have an Ozone Depleting Potential (ODP) rating of zero, and a Global Warming Potential (GWP) of less than 1950 1000, based on a 100-year time horizon.

2.9.7 Refrigerant leakage is to be minimised by leak prevention and periodic leak detection procedures. The frequency of leak detection and the maximum allowable annual leakage rate is dependent on the charge of each system and is specified in [Table 2.2.1 Refrigerant leak testing - Maximum periodicity periodicity](#).

Table 2.2.1 Refrigerant leak testing - Maximum periodicity periodicity

Existing paragraph 2.9.17 has been deleted.

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